

**TESTIMONY OF AUSTIN A. ANDERSEN
INTERIM INSPECTOR GENERAL
BEFORE THE COMMITTEE ON PUBLIC WORKS
AND THE ENVIRONMENT**

**AUDIT OF
ELEVATED LEVELS OF LEAD
IN THE DISTRICT'S DRINKING WATER**

SEPTEMBER 22, 2004

Good afternoon, Chairman Schwartz and members of the committee, I welcome the opportunity to share with you the results of our audit concerning actions taken by the Water and Sewer Authority (WASA) in response to elevated lead concentrations in the District's drinking water.

Accompanying me today are William J. DiVello, Assistant Inspector General for Audits, and Cheryl Ferrara, Deputy Assistant Inspector General for Audits.

REQUEST FOR AUDIT

This audit was initiated at the request of the Mayor, you, as Chairman of the Committee on Public Works and the Environment, and Councilmember Fenty. In order to adequately address the concerns raised in the requests, it was decided that the OIG would conduct two separate audits related to the lead content of District tap water.

Although the two audits complement each other, they have different objectives. The first audit focused on management and performance issues; whereas the objective of the second audit was to independently test the accuracy of WASA's lead-level reports. We will be discussing the results of the first audit here today, but prior to that discussion, I want to bring you up to date on our audit of the technical tests of the District's tap water.

AUDIT OF TECHNICAL TESTS OF DISTRICT TAP WATER

As you are aware, our request for quotations resulted in only one bidder because many of the potential bidders conduct business with WASA and lack independence or the appearance of independence from WASA. In a second issuance of the Request for Quotation (RFQ), the OIG Chief of Contracts recently identified at least 5 potential bidders that seem to be sufficiently independent and capable of performing the work, and we are awaiting responses to our request to the 2nd RFQ.

However, we recognize that substantial changes have occurred within WASA and in the content of the District's water since we initially planned to test residential water samples. Within the OIG, we have debated the value

of testing now or testing after WASA has concluded that the water is below that action level. We would like to, again, consider your thoughts with regard to performing the tests now.

AUDIT OF MANAGEMENT AND PERFORMANCE ISSUES

Before discussing our audit efforts, I must emphasize that the audit work is essentially complete with regard to the review of WASA's actions taken in response to identified elevated levels of lead, and we have discussed our findings with WASA officials. However, we have not issued our draft audit report. We expect to issue the draft report next week and hope to obtain WASA's comments and finalize the audit report by the end of next month. As you know, it is generally our policy not to discuss the results of our audits publicly until we have received comments back from the agency and resolved any outstanding issues. However, because of the timing of this hearing, the significance of the issues, and the fact that the audit results have been conveyed to WASA management, I am prepared to share the results of our audit to assist this Committee in its decision-making process.

OVERVIEW OF AUDIT REPORT FINDINGS

My testimony will focus specifically on WASA's management controls over the processes and actions related to: 1) WASA's annual monitoring efforts; 2) WASA's lead service line replacement efforts; and 3) WASA's communication efforts when lead action levels are exceeded. I would like to begin by stating that WASA has been receptive to our audit efforts and has taken actions to address certain deficiencies in the areas identified above.

Our draft audit report containing 9 findings and 12 recommendations concludes that WASA's current initiatives to address elevated lead concentrations in the District's tap water are noteworthy. However, past management actions taken by WASA officials in response to levels of elevated lead contaminants show that WASA could have been better prepared to deal with the issues. Specifically, improvements can be made to better ensure the safety and health of residents and the timely and accurate reporting to regulatory and oversight officials.

The recommendations, in part, center on establishing definitive policies and procedures in the event lead action levels are exceeded, documenting the methodology for the selection of participants for WASA's annual

monitoring efforts, accurately and timely reporting all test results of lead samples to the EPA, providing customers/residents and other stakeholders pertinent and timely information, and improving communication with the Department of Health (DOH).

OBJECTIVES

The main objective of this audit was to determine whether management controls were in place to ensure that WASA was effective, timely, and accurate in disseminating critical information within WASA and to external stakeholders so that decision makers and others have a reasonable basis for taking actions that affect the health of those served by WASA.

METHODOLOGY

To accomplish our objectives, we examined documents from 1987 to 2004, to include water sample test results, literature from experts on lead and other contaminants, data distributed to customers, residents, and the general population, and media reports. We also conducted interviews with WASA representatives, District officials, Washington Aqueduct personnel, and EPA representatives who have a role in addressing the current lead issue in the District. We coordinated our efforts with other entities, to include the

Government Accountability Office and special Task Forces formed and contractors engaged to review and report on the lead issue in the District. We also attended public hearings to identify other concerns or issues to consider in performing our review.

What follows is a synopsis of each of the findings contained in our draft audit report.

**FINDING 1: INTERNAL POLICIES AND PROCEDURES RELATED
TO THE LEAD AND COPPER RULE**

Written internal guidelines that implement federal and local requirements of law and regulation serve to memorialize an organization's practice, thereby fostering consistent approaches and actions to ensure compliance. We found that WASA had not developed or maintained internal policies or procedures for implementing the requirements set forth in the National Primary Drinking Water Regulations or the Lead and Copper Rule. Specifically, WASA needed to document procedures on: (1) how to select, take, and report lead water sample test results; (2) who to contact, internally or externally, about water sample test results; (3) what information is to be provided to the EPA, DOH, District residents, and other stakeholders; and (4) how the information is to be relayed.

WASA officials stated that they have recently issued a standard operating procedure that identified the responsibilities of WASA's Water Quality Division in the event District water exceeded the lead action level. We believe that developing and documenting internal policies is a positive step toward strengthening WASA's operations.

FINDING 2: ANNUAL MONITORING EFFORTS

A water monitoring program to test for and report on lead concentrations must be consistent in the application of EPA criteria for: (1) selecting residences to participate in the program, and (2) containing accurate records that document participation in the program. We found that WASA did not have a documented program that identified its methodology to select, replace, or substitute residences participating in its annual monitoring efforts.

At the start of the next required monitoring period (January 1, 2005), and each reporting period thereafter, WASA will submit its plan for conducting the sampling, as required by 40 C.F.R. § 141.86, to the EPA. The C.F.R. states that the plan is to include the address of each proposed sampling location and how each sampling location satisfies the criteria for inclusion in the sampling pool.

FINDING 3: REPORTING OF WATER SAMPLE TEST RESULTS

The integrity of WASA's annual monitoring efforts rests on WASA's organizational ability to consistently and accurately take and report water sample tests results, free of error or bias. Our review showed there were discrepancies between the water sample results reported to the EPA and the water samples analyzed by the Washington Aqueduct for WASA's annual monitoring efforts. Specifically, we identified that WASA did not: 1) submit the results of all water sample tests, which during one monitoring period would have caused WASA to exceed the lead action level; 2) take the required number of water sample tests for one monitoring period; and 3) timely report water sample test results to the EPA. We believe that WASA's lack of policies addressing who should receive test results, and to whom and when these test results should be reported, coupled with inadequate channels of communication between WASA's Water Quality Division and WASA's executive officials, caused tests results to be inaccurately and untimely reported.

WASA has agreed to adhere to the EPA reporting requirements. We believe that once WASA establishes and documents its annual monitoring efforts, it

will be able to conduct the number of required tests within required monitoring periods and timely report results to EPA.

FINDING 4: CUSTOMER INFORMATION SYSTEM

An accurate and reliable information system is essential for managing the reporting and monitoring requirements established by federal law and local guidelines. Our review of the data contained in WASA's Customer Information System (CIS) found that information regarding the composition of customer service lines was inaccurate or incomplete. WASA officials agreed with our conclusions regarding the data contained in its CIS and added that the CIS was not created or originally designed to contain information on the content of customer service lines, but rather, was initially to be used to compile billing and customer contact information. WASA officials added that WASA's CIS is continuously updated as WASA continues to define and fine-tune its initial inventory of properties that contain lead service lines. WASA is also undertaking some test "dig-ups" where test results suggest the presence of a lead service line, and is now developing an appropriate plan to identify and prioritize service line replacements using information in its CIS as well as other sources of data.

FINDINGS 5 - 7: LEAD SERVICE LINE REPLACEMENT EFFORTS

WASA did not have a documented Lead Service Line Replacement Program prior to exceeding the established lead action level in FY 2002. Further, WASA's FY 2003 lead service line replacement efforts did not effectively use available data to prioritize and replace lead service lines. WASA officials stated that due to limited time to meet reporting and testing requirements, the number of actual lines replaced was less than expected and replacements were not always based on assigned priority levels. WASA officials have refined their process for lead service line replacements being conducted in FY 2004 and scheduled for 2005 to address the highest lead levels and the most vulnerable populations in areas where replacement is most efficient.

FINDING 8: COMMUNICATION AND PUBLIC EDUCATION EFFORTS

Based on our analysis of letters originally sent to customers, the letters did not contain all required elements, nor were they clear, concise, and specifically written in a manner that would convey a sense of urgency. For instance, the letters were required to report a description of the violation and the date the violation occurred. Most importantly, the notification should have identified the population at risk, or otherwise vulnerable, and the potential adverse

health effects resulting from the violation. Collectively, information contained on flyers, pamphlets, letters, in community meetings, and posted on WASA's website did constitute a public education campaign and meet all the requirements of the regulations. However, when each information source was analyzed individually, we concluded that information necessary to educate the public on the potential hazards of and recommended treatments for lead exposure was not effectively conveyed as intended.

While WASA has made progress in its public awareness initiatives, WASA can further improve its communication efforts and education program for notifying the public about the condition of their drinking water, educating consumers about the potential health effects of high concentrations of lead in their drinking water, and any necessary precautionary measures that need to be taken to protect themselves from lead exposure.

Since exceeding the lead action level, WASA has conducted over 35,000 tests of water samples to monitor the concentration of lead in District homes. Additionally, WASA has shipped filters to every residence believed to have a lead service line pipe, and sent out over 300,000 letters in English and Spanish with information to every known address in the District of Columbia on the subject of lead in the drinking water.

FINDING 9: COORDINATION WITH THE DEPARTMENT OF HEALTH

WASA did not timely notify DOH regarding the issue of lead in the District's drinking water. WASA also did not provide an open channel of communication with DOH for reporting the results of water testing. Prior to 2004, DOH officials stated that it was very difficult to obtain test results and other data from WASA. WASA officials contend that they have adequately communicated information to DOH.

Irrespective of where the breakdown in communication occurred, timely coordination between WASA and DOH would help in providing vital information and assistance to residents. Such information will include test results of water samples, availability of blood screening, or other pertinent data to assist residents in treating or preventing the harmful affects of lead consumption.

That concludes my testimony presenting the results of our audit of actions taken by the Water and Sewer Authority in response to elevated lead concentrations in the District's drinking water. Thank you for providing me the opportunity to share the results of our audit with you. At this time, my colleagues will be happy to answer your questions.